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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,978

12/31/2003

John J. Shin

047711-0335

5462

23392 7590 06/11/2010

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EXAMINER

BHAT, ADITYA S

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

06/11/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/750,978	Applicant(s) SHIN ET AL.	
	Examiner ADITYA BHAT	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 26-49 and 57-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-36, 38-42 and 57-61 is/are rejected.
- 7) ☒ Claim(s) 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/8/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status

1. Claims 1-16, 26-49 and 57-61 are currently pending in this application.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 4/08/2010 was received. The submission is in compliance with the provisions of 37 CFR 1.97 and 37 CFR 1.98. Accordingly, the information disclosure statement has being considered by the examiner.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 4/8/2010 has been entered.

Drawings

4. The drawings submitted on 12/31/2003 are in compliance with 37 CFR § 1.81 and 37 CFR § 1.83 and have been accepted by the examiner.

Claim Objections

5. Claim 37 is objected to because of the following informalities: "the kalman filter" does not have proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 26-30, 33-42 and 57-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Goode, JR. et al. (USPUB 2005/0043598)

With regards to claims 27 and 58, Goode, JR. et al. (USPUB 2005/0043598) teaches the sensor is a glucose sensor. (256; figure 11)

With regards to claims 28 and 59, Goode, JR. et al. (USPUB 2005/0043598) teaches the data value is a blood glucose concentration. (304; figure 12)

With regards to claims 33-34, Goode, JR. et al. (USPUB 2005/0043598) teaches the first/second threshold varies depending on the blood glucose concentration. (Page, 20, Paragraph 364)

With regards to claims 26 and 57, Goode, JR. et al. (USPUB 2005/0043598) teaches a method and apparatus for calibrating a sensor comprising:

receiving a plurality of data values from the sensor; (51; figure 5) (Page 14, paragraph 304)

determining the reliability of each data value of the plurality of data values; (53; figure 53) (Page 17, paragraph 313)

discarding data values of the plurality of data values that are unreliable; (Page 17, paragraph 339)

filtering the data values of the plurality of data that have not been discarded; (Page 20, Paragraph 368) and

adjusting an output of the sensor using the filtered data values.(56,57; figure 5)

With regards to claims 29-30 and 60-61, Goode, JR. et al. (USPUB 2005/0043598) teaches determining the reliability of each data value comprises comparing each data value to a predetermined threshold. (53;figure 53) (Page 17, paragraph 313)

With regards to claim 35, Goode, JR. et al. (USPUB 2005/0043598) teaches discarding data values that do not meet a pre-established criterion related to the predetermined threshold. (Page 17, paragraph 339)

With regards to claim 36, Goode, JR. et al. (USPUB 2005/0043598) teaches filtering the data values comprises filtering the data values with an adaptive filter. (Page 20, Paragraph 368) (page 11, paragraphs 0268-0269)

With regards to claim 39, Goode, JR. et al. (USPUB 2005/0043598) teaches the parameter is a standard deviation of the data values of the plurality of data that has not been discarded (Page 14, paragraph 307)

With regards to claim 40, Goode, JR. et al. (USPUB 2005/0043598) teaches the parameter is a standard deviation of an absolute value of data values within the data values of the plurality of data that have not been discarded. (Page 17, paragraph 339) (Page 14, paragraph 307)

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With regards to claim 41, Goode, JR. et al. (USPUB 2005/0043598) teaches wherein the standard deviation is a windowed, unweighted standard deviation. (Page 14, paragraph 307)

With regards to claim 42, Goode, JR. et al. (USPUB 2005/0043598) teaches the standard deviation is a recursive, weighted standard deviation. (Page 14, paragraph 307)

With regards to claim 38, Goode, JR. et al. (USPUB 2005/0043598) teaches filtering the data values with an adaptive filter comprises using the adaptive filter with a parameter based on the data values of the plurality of data that have not been discarded. (Page 20, Paragraph 368)

Goode, JR. et al. clearly teaches discarding unusable data and filtering data. Clearly, there would be no point in filtering the unusable data as it is unusable.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being obvious over Goode, JR. et al. (USPUB 2005/0043598) in view of Riedel (USPN 6,069,011).

With regards to claims 31-32 Goode, JR. et al. (USPUB 2005/0043598) does not appear to teach first and second order derivatives.

Riedel (USPN 6,069,011) teaches first and second order derivatives.

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the Goode, JR. et al. (USPUB 2005/0043598) invention to include first and second order derivatives taught by Riedel (USPN 6,069,011) in order to get a more accurate reading of the desired parameter.

Allowable Subject Matter

10. The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 43:

The primary reason for the allowance of claim 1 is the inclusion of the method steps of: terminating receipt of data from the sensor in response to determining that the first parameters relating to the first and the second data values exceed the first threshold value. It is this/these features found in the claim(s), as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this/these claim(s) allowable over the prior art.

The primary reason for the allowance of claim 43 is the inclusion of: means for terminating receipt of data from the sensor in response to determining that the first parameters relating to the first and the second data values exceed the first threshold value. It is this/these features found in the claim(s), as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this/these claim(s) allowable over the prior art.

Claims 2-16, 62-65 & 69 are allowed due to their dependency on claim 1.

Claims 44-49 and 66-68 are allowed due to their dependency on claim 43.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kamath et al. (USPUB 20050143635) teaches a calibration technique for a continuous analyte sensor.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADITYA BHAT whose telephone number is (571)272-2270. The examiner can normally be reached on 9:30-5:30.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aditya Bhat/
Primary Examiner, Art Unit 2863
June 8, 2010